



- X Monitors overall voltage
- X Local display via the RGB
- X Embedded free software
- X Link up to 31 units from single IP address
- X Choice of UK, Schuko, C13 and C19 socket types
- X Horizontal and vertical options

Features

- Monitors overall voltage
- Embedded free software
- Link up to 31 units from single IP address
- Single or 3 phase monitoring
- Local display via the RGB
- Optional sensors - temperature, humidity, door
- Choice of UK, Schuko, C13 and C19 socket types
- Horizontal and vertical options

Product Overview

The Excel Intelligent INT1 is designed to provide local and remote overall power monitoring and is available with up to 48 sockets with any combination of socket type including UK, Schuko, C13, C19 etc.

The Excel Intelligent INT1 can work as an individual master or run as a master and slave system. One master can have up to 31 slaves, all from one IP address, reducing the requirement for multiple IP addresses. The Excel Intelligent INT1 comes with free software making it a highly competitive solution allowing the user to monitor and report on up to 50 IP addresses with the software. In theory it is possible to have up to 1600 PDU's each with up to 48 outlets per PDU, all from one free software licence.

The Excel Intelligent PDU range provides billing quality accuracy to better than 1%, allowing the unit to be used in co-location centres for the monitoring and charging of power used.

The Excel Intelligent INT1 is designed for use in both single and 3 phase systems and to that end is designed with one monitoring board, but with a meter board at the beginning where the input power flows through, allowing them to sample the power 4000 times per second. This enables the units to measure the power at every point on the sine wave providing a very accurate result. Most Intelligent PDUs available only sample between 200 and 250 volts, so results are not as accurate, particularly with RMS voltages.

The meter board allows the unit to economically meter a 3 phase system, as it uses 3 meter boards, one per phase. If required the PDU can be split into 3 separate sections (for use in co-location facilities) and group the results for 3 separate users on the same power strip. Other possibilities are to measure both A and B feeds through one monitoring system.

Specification

Parameter	Value
Chassis Material	Sheet mild steel
Finish	Black Power Coat
Earthing	M6 Stud
Standard	Manufactured in accordance with BS EN 60950-1
Fixing Method	End brackets - Ears down
WEEE	Compliant
RoHS	Compliant
CE	Compliant
Operating Temp Range	-10°C to +50°C
Available Socket Types	UK, Schuko, C13, C19, Locked Versions

Monitoring Capabilities

Local display via the RGB shows per phase:

- Voltage
- Overall amps (current)
- Kilowatts
- Cumulative Kw/hours
- True Power Factor

Overall PMS Unit shows per phase remotely:

- Voltage
- Overall amps (current)
- Kilowatts
- Frequency
- kVA
- Cumulative Kw/hours
- BTU,s
- K/Joules
- Kg CO2
- True Power Factor

The unit can also provide the following optional environmental and security capabilities:

- 8 x temperature sensors (daisy chained through a single port)
- 1 x temperature and humidity sensor port
- 1 x door lock port
- 1 x key pad port
- 1 x door sensor port
- 1 x close contact port to allow connection

Measurement Accuracy

The Meter board measures the complete AC waveform 4000 times a second to provide a class II billing quality measurement of RMS Volts, RMS Amps, Kilowatts, Power Factor, Frequency, and Internal PDU Temperature.

Additional measurements of Peak Volts, Peak Amps, and kVA are also available. These values are used to calculate kWh, BTU's, Kilograms of Co2, Kilojoules, and Energy Cost.

Communications Protocol's

The Excel Intelligent PDU has embedded HTML web pages, which can be viewed as either HTTP or the more secure HTTPS. The web pages allow a user to Monitor and control the power usage of a PDU, as well as providing the interface to set up the PDU and commission it for use.

The PDU can also communicate via SNMP V1, 2, and 3, enabling the user to integrate the PDU's with their own software choice using a MIB file.

RGB Display

As standard the PDU comes with a built in RGB Display, the display shows IP Address, kWh, and Volts, Amps, power factor and kilowatts per phase.

In the event of an alarm condition the display changes colour and flashes giving a visual representation of an alert.

An optional remote display can be fitted to the rack door or in a prominent position where the inbuilt display may be obscured at the rear of a rack.

Typical Configurations

Part Number	Description
555-1H-C20-INT1-8C13-xxx-3	EXL 1U Horizontal 8 C13 Overall monitored C20 Plug
555-1H-Com32-INT1-8C13-xxx-3	EXL 1U Horizontal 8 C13 Overall monitored 32A Commando
555-1H-C20-INT1-8C19-xxx-3	EXL 1U Horizontal 8 C19 Overall monitored C20 Plug
555-1H-Com32-INT1-8C19-xxx-3	EXL 1U Horizontal 8 C19 Overall monitored 32A Commando
555-1H-Com16-INT1-8C13-xxx-3	EXL 1U Horizontal 8 C13 Overall monitored 16A Commando
555-1H-Com16-INT1-6C13-2C19-3	EXL 1U Horizontal 6 C13/2C19 Overall monitored 16A Commando
555-1H-C20-INT-8C13-4C19-3	EXL 2U Horizontal 8 C13/4 C19 Overall monitored 16A Commando
555-1H-Com32-INT1-12C13-4C19-3	EXL 2U Horizontal 12 C13/4 C19 Overall monitored 32A Commando
555-1H-Com16-INT1-8C13-4C19-3	EXL 2U Horizontal 8 C13/4 C19 Overall monitored 16A Commando
555-1V-Com16-INT1-12C13-4C19-3B	EXL Vertical 12 C13/4 C19 Overall Monitored 16A Commando
555-1V-Com32-INT1-16C13-4C19-3B	EXL Vertical 16 C13/4 C19 Overall Monitored 32A Commando
555-1V-Com32-INT1-20C13-4C19-3B	EXL Vertical 20 C13/4 C19 Overall monitored 32A Commando
555-1V-Com16-INT1-16C13-xxx-3B	EXL Vertical 16 C13 Overall Monitored 16 Amp Commando
555-1V-Com32-INT1-20C13-xxx-3B	EXL Vertical 20 C13 Overall monitored 16A Commando
555-1V-Com32-INT1-24C13-xxx-3B	EXL Vertical 24 C13 Overall Monitored 32A Commando
555-1V-Com16-INT1-16C19-xxx-3B	EXL Vertical 16 C19 Overall monitored 16A Commando
555-1V-Com32-INT1-20C19-xxx-3B	EXL Vertical 20 C19 Overall Monitored 32A Commando
555-1V-Com32-INT1-24C19-xxx-3B	EXL Vertical 24 C19 Overall monitored 32A Commando
555-1V-Com16-INT1-16UKL-xxx-3B	EXL Vertical 16 UK 13 Amp Overall monitored 16A Commando
555-1V-Com32-INT1-20UKL-xxx-3B	EXL Vertical 20 UK 13 Amp Overall monitored 32A Commando
555-1V-Com32-INT1-24UKL-xxx-3B	EXL Vertical 24 UK 13 Amp Overall monitored 32A Commando
555-1V-SCH-INT1-16SCH-xxx-3B	EXL Vertical 16 Schuko Overall monitored Schuko Plug
555-1V-Com32-INT1-20SCH-xxx-3B	EXL Vertical 20 Schuko Overall monitored 32 Amp Commando
555-1V-SCH-INT1-24SCH-xxx-3B	EXL Vertical 24 Schuko Overall monitored 32 Amp Commando

Please see the separate part number configuration table to see how to build your required Excel Intelligent PDU.

Excel is a world-class premium performing end-to-end infrastructure solution - designed, manufactured, supported and delivered - without compromise.

Contact us at sales@excel-networking.com